

**PATENT****PENDING CLAIMS AS AMENDED**

Please amend the claims as follows:

1. (Currently amended) A method for secure transmissions, the method comprising:  
determining a registration key specific to a participant in a transmission;  
determining a first key;  
encrypting the first key with the registration key;  
sending the encrypted first key to the participant in the transmission;  
sending the first key on a broadcast channel;  
determining a second key;  
encrypting the second key with the first key; and  
sending the second key on an out of band channel; and  
updating the first and second keys. key after a first time period has elapsed; and  
updating the second key after a second time period has elapsed, wherein the second key is  
updated in two parts, a first part known to the participant in the transaction and a  
second part sent on a broadcast channel.
2. (Original) The method as in claim 1, wherein updating further comprises:  
updating the first key according to a first time period; and  
updating the second key according to a second time period, wherein the second time period is less than the first time period.
3. (Original) The method as in claim 2, wherein updating further comprises:  
encrypting an updated first key with the registration key ; and  
encrypting an updated second key with the updated first key.
4. (Original) The method as in claim 2, further comprising:  
encrypting a broadcast stream of information using the second key; and  
transmitting the encrypted broadcast stream of information.

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5. (Original) The method as in claim 4, wherein the broadcast stream of information comprises video information.
- 6.. (Original) The method as in claim 4, wherein the broadcast stream of information comprises Internet Protocol packets.
7. (Original) The method as in claim 3, further comprising:  
calculating a registration key information message; and  
transmitting the registration key information message.
8. (Original) The method as in claim 7, further comprising:  
calculating a first key information message corresponding to the updated and encrypted first key; and  
transmitting the first key information message.
9. (Original) The method as in claim 8, further comprising:  
calculating a second key information message corresponding to the updated and encrypted second key; and  
transmitting the second key information message.
10. (Original) The method as in claim 1, further comprising:  
transmitting the encrypted first key; and  
transmitting the encrypted second key.
11. (Currently amended) A method for secure reception of a transmission, the method comprising:  
receiving a registration key specific to a participant in a transmission;  
receiving a first key encrypted with the registration key, on a broadcast channel;  
decrypting the first key with the registration key;

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receiving a second key on an out of band channel;  
decrypting the second key with the first key;  
receiving a broadcast stream of information; and  
decrypting the broadcast stream of information using the second key[. . .];  
receiving an updated first key after a first time period has elapsed; and  
receiving an updated second key after a second time period has elapsed, wherein the  
second key is updated in two parts, a first part known to the participant in the  
transmission and a second part sent on a broadcast channel.

12. (Original) The method as in claim 11, further comprising:

storing the first key in a secure memory storage unit; and  
storing the second key in a memory storage unit.

3. (Original) The method as in claim 11, further comprising:

recovering the first key from a first key information message; and  
recovering the second key from a second key information message.

14. (Original) The method as in claim 11, further comprising:

updating the first key according to a first time period; and  
updating the second key according to a second time period.

15. (Currently amended) In a wireless communication system supporting a broadcast service option, an infrastructure element comprising:

a receive circuitry adapted to receive a first key on a broadcast channel and to receive a second key on an out of band channel adapted to receive a registration key specific to a participant in a transmission, receive a first key encrypted with the registration key, receiving a second key encrypted with the first key, receiving an updated first key after a first time period has elapsed, and receiving an updated second key after a second time period has elapsed, wherein the second key is

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updated in two parts, a first part known to the participant in the transmission and a second part sent on a broadcast channel;

a user identification unit, operative to recover a short-time key for decrypting a broadcast message, comprising:

processing unit operative to decrypt key information;

memory storage unit for storing a registration key; and

a mobile equipment unit adapted to apply the short-time key for decrypting the broadcast message.

16. (Original) The infrastructure element as in claim 15, wherein the short-time key is processed by the user identification unit and passed to the mobile equipment unit.

17. (Original) The infrastructure element as in claim 15, wherein the memory storage unit is a secure memory storage unit.

18. (Original) The infrastructure element as in claim 15, wherein the memory storage unit stores a broadcast access key, and wherein the processing unit decrypts the short-time key using the broadcast access key.

19. (Original) The infrastructure element as in claim 18, wherein the short-time key is updated at a first frequency.

20. (Original) The infrastructure element as in claim 19, wherein the broadcast access key is updated at a second frequency less than the first frequency.

21. (Original) The infrastructure element as in claim 15, wherein the broadcast service option is a video service.

22. (Currently amended) A wireless communication system, comprising:

means for determining a registration key specific to a participant in a transmission;

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means for determining a first key;  
means for encrypting the first key with the registration key;  
means for sending the encrypted first key to the participant in the transmission;  
means for sending the first key on a broadcast channel;  
means for determining a second key;  
means for encrypting the second key with the first key; and  
means for sending the second key on an out-of-band channel, and;  
means for updating the first and second keys, key after a first time period has elapsed; and  
means for updating the second key after a second time period has elapsed, wherein the  
second key is updated in two parts, a first part known to the participant in the  
transmission and a second part sent on a broadcast channel.

## 23. (Currently amended) An infrastructure element, comprising:

means for receiving a registration key specific to a participant in a transmission;  
means for receiving a first key encrypted with the registration key, on a broadcast  
channel;  
means for decrypting the first key with the registration key;  
means for receiving a second key on-an-out-of-band channel;  
means for decrypting the second key with the first key;  
means for receiving a broadcast stream of information; and  
means for decrypting the broadcast stream of information using the second key[[-]];  
means for updating the first key after a first time period has elapsed; and  
means for updating the second key after a second time period has elapsed, wherein the  
second key is updated in two parts, a first part known to the participant in the  
transmission and a second part sent on a broadcast channel.

## 24. (Currently amended) A digital signal storage device, comprising:

first set of instructions for receiving a registration key specific to a participant in a  
transmission;

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second set of instructions for receiving a first key encrypted with the registration key ~~on-a broadcast channel;~~  
third set of instructions for decrypting the first key with the registration key;  
fourth set of instructions for receiving a second key ~~on-an out-of band channel;~~  
fifth set of instructions for decrypting the second key with the first key;  
sixth set of instructions for receiving a broadcast stream of information; and  
seventh set of instructions for decrypting the broadcast stream of information using the  
second key[[.]];  
eighth set of instructions for updating the first key after a first time period has elapsed,  
updating the second key after a second time period has elapsed, wherein the  
second key is updated in two parts, a first part known to the participant in the  
transmission and a second part sent on a broadcast channel.

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